



## **OVERVIEW OF FAA CENTRAL REGION RUNWAY SAFETY WORKSHOP May 4-5, 2000**

The NBC Dateline Video set the stage for Central Region's Runway Safety Workshop. Regional Administrator, John Turner, kicked off the workshop, explaining the first half day would be devoted to education about runway incursions (RI) from 360° perspective (airlines, pilots, controllers, airports, FAA managers.) The workshop would conclude with breakout sessions, in which participants, divided into teams representing a diversity of aviation backgrounds, brainstorm possible solutions to the problem. These breakout sessions are structured around a series of questions attached to the agenda, providing attendees a focus and early insight into workshop expectations.

### **John Mayrhofer, Director, Runway Safety Program**

In the midst of 68M takeoffs and landings last year, 321 runway incursions occurred at our nation's towered airports. Although escalating RI numbers stabilized in '99, meeting FAA self-imposed reduction goals will be tough. John recited a litany of RI prevention measures now under way: improved standards for airport lighting/markings/signage; expanded GA pilot training; partnerships with alphabet groups, safety seminars conducted for industry by FAA safety offices; runway incursion action team visits to airports; continued focus on technology. Regional workshops, like this one, are aimed at stakeholder involvement in identifying solutions (likely specific to local airports) for curbing RI. Recommendations will be given to AOA-1, rolled up and shared with the aviation community at a national summit in DC 6/26-28.

### **Denny Lawson, Manager, Runway Safety Program**

Reported nationwide trends/statistics for RI. ATS-20 established 2/00 to take systemic look at problem. In the business of risk reduction, this organization's activities are spread across five LOBs & industry. Its mission—provide executive direction and single point of contact for runway safety initiatives. As of 4/28, 131 RI have occurred, four in Central Region.

Nationally, this is one of the worst years for RI ever if statistics are extrapolated annually, but one of best for this region. ATS-20's website, designed to enhance RI prevention through education, training and awareness, is set to go online 6/00. ([faa.gov/runwaysafety](http://faa.gov/runwaysafety))

### **Ed Dorsett, Runway Safety Program Integrated Team**

RI AT onsite evaluations conducted by FAA at airports with high incidence of RI. Ed reviewed initiatives implemented and planned: updated airport signage video, advanced taxiway guidance system, radio frequency system for ground vehicles, joint FAA/AOPA initiative for posting digital airport diagrams on AOPA website, partnerships with ATS/AFZ/AVN/AMA, training proficiency unit effective 1/01, monthly proficiency training for tower controllers, as well as CBI course. To target GA pilot deviations, which are on the rise: situation training video, ramp safety video, safety seminars conducted by FSDO safety managers, standardized cockpit procedures for airport surface movement, updated SMGCS brochure and LAHSO brochure out in June, gap analysis of current research with NASA. Using LAX as a test bed, take a look at the "whys" of RI, relating to human factors. That analysis will be conducted early July. Ed gave outlook for fielding technologies—ASDE-3, AMASS and loop detection system. FAA is not "slow rolling" ASDE-3 or AMASS. These are complex systems, complicated by fact that no two airports are alike.

### **Del Meadows, Runway Incursion Action Team**

ATP-20 schedules/conducts RI AT at national level, coordinates with all nine regions. On daily basis, looks at every surface incident at towered airports to determine which meet criteria of RI (about 1/3 of surface incidents do.) GA pilots account for 60-70% of RI. New form to report vehicle/pedestrian deviations may account for jump in number of RI in this category. Top 20 list includes all airports with 4 or more RI; rank is constantly shifting as list is based on rolling 12-month period. RI charted by region; last year ACE had 16. RI AT action plan is posted on website, complete with quiz/monthly newsletter.

**Don Hensley, Air Traffic Operations Branch Manager**

Prevention of RI was a Central Region focus even before current national initiative. Don reviewed regional efforts to hold RI in check: RI AT meetings since 1991, annual meetings between FAA, FBOs and users; annual controller RI avoidance training; quarterly alternation of RI D alarms from a female to male aural alert; Letter to Airmen to all pilots in Central Region; letter to all flight instructors; monthly user awareness meetings; tape reviews conducted at top 20 RI airports; annual surface incident awareness meetings during March/April at all controlled airports; monthly refresher training for ATCT specialists; CBI course on preventing RI by 6/00. In ACE, we are also reviewing all '99-00 surface incident statistics, tracking percentage occurring in weather, day/night, type of aircraft, flights out of uncontrolled airport, etc., to gain more perspective.

Initiatives directed toward pilots focus on communications; airport knowledge; listen before transmitting, think before transmitting; never assume and always read back; maintain sterile cockpit; scan if lost; establish immediate contact with ATC; progressive taxi; proper radio operation; keep airport diagrams handy; be alert to airport vehicles.

At RI AT locations, RI have gone down. Even though ACE handles 5-7% of total traffic nationwide, we are contributing to RI at the same rate as some larger regions. Runway safety area needs work. Airport managers are sensitive to closing this area for maintenance. For many years, you could operate there as long as direct contact with tower was maintained.

Reminder: if you think safety is expensive, compare the cost to an accident. Remember—a RI developed to its full potential is an accident. Urged attendees to be creative in break-out sessions. Told them to share whatever they've encountered if it works. Recommendations from this workshop will be posted on ACE website. Fiscally, some suggestions won't "fly." But this one-day effort will make a difference.

Don took Q&A before RIAT briefings:

Q. Why hold surface awareness meetings during March/April timeframe?

A. Mowing/construction season begins in the Spring.

Q. What level of confidence do you have that RI aren't underreported?

A. There are no secrets. Surface incidents eventually are revealed and scrutinized.

Q. How can we address problems at non-towered airports?

A. Flight Standards will be working this issue.

Q. Please name members of the ACE RIAT?

A. Mike Mullen, Dale Glaspie, Les Moore, Randy Robinson, all aviation safety inspectors and Don Hensley.

Q. How much has the incidence increased as a result of attention being paid to RI?

A. Some, because definitions have changed somewhat. In past, RI s were sometimes hidden in operational deviations, and statistics were not kept past a certain number of years. Even taking this into account, RI levels have risen.

Next came RIAT briefings for the following airports: Cedar Rapids, Des Moines, Lincoln, Omaha and St. Louis. Highlights available in hand-outs.

**Mike Mullen, Central Region Airports Division**

I illustrated his presentation about proper airfield marking/lighting and signage with 53 slides, showing the "good, the bad and the ugly." Advised airport operators to maintain marking/lighting/signage in good condition.... implement new marking standards...& monitor construction for FAA compliance. In event of an accident, NTSB will scrutinize markings, etc., for their contribution. Airports need effective self-inspection program to identify maintenance problems. Advisable to conduct inspection at night. Maintenance personnel need to be knowledgeable of Part 139 requirements. Mike reviewed new marking standards, issued last August, that must be implemented within a year. He advised double-sizing hold markings, although this is optional. (STL did this at every intersection, and RI were reduced

down to one.) Certification inspectors put on notice to identify non-standard markings/signage. Special program exists in regional Airports office for reviewing airport AIP projects to catch discrepancies early on. Meet with ATCT to determine problem intersections. Schedule RI AT inspections with tower and local users to arrive at corrective actions. Beware of non-standard methods to correct problems; could add to confusion and be counterproductive. Coordinate first with FAA. Pavement reconfiguration should receive high priority for AIP funding. Establish formal vehicle training program. New FAA training guidebook is on website. Small airports with lots of student pilots should consider installing signage as part of an AIP project.

### **Captain Matt Cummings, TWA Pilot**

Capt. Cummings represented ALPA as its regional safety chairman. Aviation community has not done all it could to mitigate risk of RI. We need all data and so far only have the tip of iceberg. Believes true numbers are an order of magnitude higher than is represented on previous graphs. Commercial aviation safety teams collected more than 10X number of reports in same period. Definition of RI masks magnitude of problem; more potential hazards exist than are being captured. Need to expand it and the reporting system to include non-towered airports ASAP. Institute voluntary system that rewards self-disclosure.

FAA has studied symptoms *ad nauseum*, beginning with Mitre studies in the early '90s. Agency issued RI prevention plans in '91, '93, '95, and '98. The Commercial Aviation Safety Team (CAST) is the answer to safer runways and the right forum for raising relevant safety issues. Guiding the mission of CAST gov't and industry leadership is a data-driven strategy. Its vision is focusing on the right things in the right priority to result in the greatest improvement in commercial aviation safety. What does Jane Garvey say about CAST?

In April, she mentioned three areas of focus—commercial aviation, general aviation and cabin safety. She agreed there must be a systematic data-driven process for data gathering, identifying and implementing interventions. Cited three important lessons from CAST experience: collaborative approach works....partnership of equals is essential...the challenge is staying the course, remaining focused.

To mitigate risks, CAST advises implementing corrective actions based on data, not subjective decisions. It has forwarded more than 40 recommendations that were data-driven and consensus based.

**Paul McGraw, Air Transport Association**

ATA is supportive of RIAT and CAST processes. Shares FAA concern over runway incursions and vowed to continue committing resources until both local and system-wide solutions are developed and implemented. Calling this effort a “work in progress,” McGraw placed it at or near top of industry's “must solve” list of safety issues. ATA pledges to:

- Heighten awareness
- Participate in process by drawing airline management into process
- Work within ATA committees & councils to coordinate industry initiatives
- Facilitate proposed industry solutions from CEO down to flight line
- Lobby for recommended RI budget items & actively coordinate RE&D efforts.

Recommendations from this workshop must have support of entire industry to be effective. Local solutions may not be applicable or appropriate for national application, but including all stakeholders is critical.

Key to finding solutions is : 1) agreeing on definition of the problem; 2) standardization of reporting and subsequent analysis of RI ; and 3) industry-wide support for a solution.

**Craig Burzych, NATCA Regional Representative**

As a controller at O'Hare, Craig related his own experiences with RI , including a “shaggy dog” story. Used spate of nasty incidents at ORD in '99 as springboard for RI improvements at that airport. After last year's scares, controllers attended meeting of airport vehicle operators. Talked about phraseology and reading back hold short instructions. Advised them to scan first when crossing runway, not rely entirely on controller instructions. Encouraged drivers to use service roads, even if more time was involved. Controllers were told to note instances when operators crossed runway and question airport management. Vehicle operator calls to

controllers, seeking permission to cross runway, have dropped significantly. Outcome: no crossings; no RI in this category.

### **Wrap-Up**

Hensley: FAA is committed to improving RI. "What by when" is the true definition of commitment. Recommendations will be sorted, categorized and posted on our website by June 15. Work with FAA's lines of business to tie dates to action items begins now. The cure is within. Everyone can make a difference; may not happen overnight, but it will in time.

Turner: Thanked participants for an excellent session and reiterated FAA's commitment to follow through.